REMARKS

Claims 1-6 and 8-58 are pending. All pending claims 1-6 and 8-58 are believed to be allowable over the references cited by the Examiner as discussed below. Accordingly, a Notice of Allowance for the present application is respectfully requested.

Rejections Under 35 U.S.C. §103

Claims 1, 2, 4, and 21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lindemann in view of Rosback.

In independent claim 1, the dynamic range associated with each signal component is controlled (by the second instructions) by dynamically adjusting *a gain factor* (a) after applying *the* gain factor to a current sample of the signal component and (b) in response to comparison of the current sample to a threshold level.

Neither Lindemann nor Rosback, either alone or in combination, discloses or suggests such a feature. Lindemann is cited at col. 5, lines 40-46 as disclosing the second instructions for independently and dynamically controlling a dynamic range associated with each one of the plurality of signal components (dynamic range compression gain calculation and application). However, Lindemann does not disclose that the gain factor is adjusted (a) after applying the gain factor to a current sample of the signal component and (b) in response to comparison of the current sample to a threshold level.

Similarly, Rosback is cited at FIG. 3, elements 22, 24, 26, and 120, col. 4, line 66-col. 5, line 14, and col. 2, lines 59-66 as disclosing "adjusting a dynamic range (for example, compression) by changing a gain (gain control) after applying the gain to a plurality of frequency band audio signals at an amplifier and comparing the audio signals from the plurality of frequency bands to a threshold.

However, while Rosback does disclose that the input signal is amplified at an amplification level G via amplifier 120 prior to further processing, the amplification level G applied at amplifier 120 is not "*the* gain factor" that is applied to the current sample, as generally recited in independent claim 1. Specifically, claim 1 recites "dynamically adjusting *a gain factor after applying* ***the*** *gain factor* to a current sample of the signal component and in response to comparison of the current sample to a threshold level." In other words, after applying the gain factor (and after a comparison to a threshold level),

the same gain factor (that was applied to the current sample of the signal component) is dynamically adjusted.

In contrast, Rosback specifically states "The amplifier 120 is included because the output of the converter 102 is quite low level, and it is desirable to amplify it to higher levels before further processing." (Col. 4, line 58-col. 5, line 3). In other words, Rosback merely applies the amplification at amplifier 120 for ease of signal processing.

In addition, as is clearly shown in FIG. 3, amplifier 120 is not controlled or in anyway affected by the output signal of the gain control circuit 22, 24, or 26. As such, amplifier 120 cannot be applying the gain factor of the gain control circuit 22, 24, or 26.

Thus, neither Lindemann nor Rosback discloses or suggests that *the gain factor* is adjusted (a) after applying *the gain factor* to a current sample of the signal component and (b) in response to comparison of the current sample to a threshold level.

Withdrawal of the rejection of independent claim 1 and claims 2, 4, and 21 dependent therefrom under 35 U.S.C. §103(a) is respectfully requested.

Claims 3, 8-19, 25, 27, 28, 31, 41, and 51-53 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lindemann in view of Rosback, and further in view of Allen.

However, the addition of the additional secondary reference Allen does not make up for the deficiencies of Lindemann in view of Rosback as discussed above. Thus claims 3, 8-19, 25, 27, 28, and 31 dependent from claim 1 are allowable at least for the same or similar reasons set forth above with reference to claim 1.

In addition, similar to independent claim 1, each of independent claims 41, 52, and 53 also recites that the dynamic range associated with each signal component is controlled by dynamically adjusting a gain factor (a) after applying the gain factor to a current sample of the signal component and (b) in response to comparison of the current sample to a threshold level. Thus, because the addition of the additional secondary reference Allen does not make up for the deficiencies of Lindemann in view of Rosback as discussed above, independent claims 41, 52 and 53, as well as dependent claims 42-51 dependent from claim 41, are also allowable at least for the same or similar reasons set forth above with reference to claim 1.

Withdrawal of the rejection of claims 3, 8-19, 25, 27, 28, 31, 41, and 51-53 under 35 U.S.C. §103(a) is respectfully requested.

Claims 5 and 6 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lindemann in view of Rosback, and further in view of Szczebak.

Claim 20 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Lindemann in view of Rosback, and further in view of Kates.

Claims 25-40 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lindemann in view of Rosback, and further in view of applicants' admitted prior art.

Claims 42-50 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lindemann in view of Rosback, and further in view of Allen and applicants' admitted prior art.

Claim 58 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Lindemann in view of Rosback, and further in view of Takeo.

However, the addition of any or all of the additional secondary references does not make up for the deficiencies of Lindemann in view of Rosback as discussed above. Thus claims 5, 6, 20, 25-40, 52-50, and 58 dependent from claim 1 or 41 are allowable at least for the same or similar reasons set forth above with reference to claim 1.

Claims 22-24 and 54-57 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lindemann in view of Rosback, and further in view of Laurence and Kates.

However, the addition of the additional secondary references Laurence and Kates does not make up for the deficiencies of Lindemann in view of Rosback as discussed above. Thus claims 22-24 dependent from claim 1 are allowable at least for the same or similar reasons set forth above with reference to claim 1.

In addition, similar to independent claim 1, each of independent claims 54-57 also recites that the dynamic range associated with each signal component is controlled by dynamically adjusting a gain factor (a) after applying the gain factor to a current sample of the signal component and (b) in response to comparison of the current sample to a threshold level. Thus, because the addition of the additional secondary reference Allen

does not make up for the deficiencies of Lindemann in view of Rosback as discussed above, independent claims 41, 52 and 53, as well as dependent claims 42-51 dependent from claim 41, are also allowable at least for the same or similar reasons set forth above with reference to claim 1.

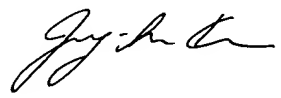
Withdrawal of the rejection of claims 22-24 and 54-57 under 35 U.S.C. §103(a) is respectfully requested.

CONCLUSION

Applicants believe that all pending claims are allowable and respectfully request a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

In the unlikely event that the transmittal letter accompanying this document is separated from this document and the Patent Office determines that an Extension of Time under 37 CFR 1.136 and/or any other relief is required, Applicant hereby petitions for any required relief including Extensions of Time and/or any other relief and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 50-2315 (Order No. 05-002).

Respectfully submitted,



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